AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Apparatus for separating an analyte from a mixture or for detecting an analyte or for determining the affinity, or a property related to affinity, between binding partners comprising:

a) a surface having the analyte or one of the binding partners immobilised thereon, in use;

b) a transducer for oscillating the surface;

c) a controller connected to the transducer for varying the ~~amplitude and/or frequency~~ amplitude, frequency, or amplitude and frequency of the oscillation to cause a dissociation event; and,

d) an analyser connected to the transducer for detecting an oscillation of the transducer due to the dissociation event;

characterised in that the controller includes an oscillator connected in a resonant circuit with the transducer such that the transducer oscillates at ~~two~~ first and second frequencies simultaneously, ~~one of these causing the transducer to oscillate the surface and the other~~ the second frequency being supplied as an output to the analyser.

2. (Currently Amended) Apparatus according to claim 1, wherein the second frequency that is supplied as an output to the analyser is a multiple of the first frequency ~~that causes the surface to oscillate~~.

3. (Currently Amended) Apparatus according to claim 2, wherein the first frequency ~~that causes the surface to oscillate~~ is the transducer's fundamental resonant frequency and the second frequency supplied as an output to the analyser is one of the transducer's overtone frequencies.

4. (Currently Amended) Apparatus according to claim 1, wherein the first frequency ~~that causes the surface to oscillate~~ is a multiple of the second frequency that is supplied as an output to the analyser.

5. (Currently Amended) Apparatus according to claim 4, wherein the first frequency ~~that causes the surface to oscillate~~ is one of the transducer's overtone frequencies and the second frequency supplied as an output to the analyser is the transducer's fundamental frequency.

6. (Previously Presented) Apparatus according to claim 1, wherein the oscillation of the transducer due to the dissociation event is at a range of frequencies located around at least one of the transducer's resonant frequencies.

7. (Previously Presented) Apparatus according to claim 1, wherein the immobilised analyte or binding partner is a metal, a polymer, a dendrimer, a self-assembled monolayer, a peptide, a protein, an antibody, an antigen, an enzyme, an enzyme inhibitor, a biologically active molecule, a drug, a polynucleotide or a peptide polynucleotide.

8. (Previously Presented) Apparatus according to claim 1, wherein the immobilised analyte or binding partner is a cell, a bacterium, a virus, a prion, an amyloid, a proteinaceous aggregate or a phage.

9. (Canceled)

10. (Previously Presented) Apparatus according to claim 1, wherein the dissociation event is detected as a motional oscillation.

11. (Previously Presented) Apparatus according to claim 1, wherein the transducer is a piezoelectric transducer.

12. (Currently Amended) Apparatus according to claim 11, wherein the transducer is a quartz crystal microbalance ~~or surface acoustic wave device~~.

13. (Original) Apparatus according to claim 11, wherein the transducer comprises zinc oxide, a piezoelectric polymer or a piezo-ceramic.

14. (Previously Presented) Apparatus according to claim 11, wherein the oscillator is a dual frequency crystal oscillator.

15. (Previously Presented) Apparatus according to claim 1, wherein the oscillator comprises two bandpass filters, each having its input connected to the transducer and its output connected to a respective amplifier, the outputs of which are combined by a power adder and supplied to the transducer, the centre frequencies of the bandpass filters corresponding to the two oscillating frequencies of the transducer.

16. (Previously Presented) Apparatus according to claim 1, wherein the analyser comprises a radiofrequency detector and a digitiser.

17. (Currently Amended) A method for separating an analyte from a mixture or for detecting an analyte or for determining the affinity, or a property related to affinity, between binding partners, the method comprising:

a) immobilising the analyte or one of the binding partners on a surface;

b) oscillating the surface;

c) varying the ~~amplitude and/or frequency~~ amplitude, frequency, or amplitude and frequency of the oscillation to cause a dissociation event; and,

d) detecting an oscillation due to the dissociation event using an analyser;

characterised by oscillating the surface at ~~two~~ first and second frequencies simultaneously, ~~one of these causing the surface to oscillate and the other~~ the second frequency being supplied as an output to the analyser for use in detecting the oscillation due to the dissociation event.

18. (Currently Amended) A method according to claim 17, wherein the surface is oscillated using a transducer and the second frequency that is supplied as an output to the analyser is a multiple of the first frequency ~~that causes the surface to oscillate~~.

19. (Currently Amended) A method according to claim 18, wherein the first frequency ~~that causes the surface to oscillate~~ is the transducer's fundamental resonant frequency and the second frequency supplied as an output to the analyser is one of the transducer's overtone frequencies.

20. (Currently Amended) A method according to claim 17, wherein the surface is oscillated using a transducer, and wherein the first frequency ~~that causes the surface to oscillate~~ is a multiple of the second frequency that is supplied as an output to the analyser.

21. (Currently Amended) A method according to claim 20, wherein the first frequency ~~that causes the surface to oscillate~~ is one of the transducer's overtone frequencies and the second frequency supplied as an output to the analyser is the transducer's fundamental frequency.

22. (Currently Amended) A method according to any claim 17, wherein the surface is oscillated using a transducer, and wherein the oscillation ~~of the transducer~~ due to the dissociation event is at a range of frequencies located around at least one of the transducer's resonant frequencies.

23. (Canceled)

24. (Previously Presented) A method according to claim 17, further comprising detecting the dissociation event as a motional oscillation.